Bingally OHL PUBLIC SSENSEN Transmission Project number: 60701792

Appendix E Local Authority Consultation



RESPONSE TO F0196906

Request Timeline

Date	Status
19/03/2024	EIR Request received [statutory deadline 17/04/2024]
16/04/2024	Clarification Requested
18/04/2024	Clarification Received [statutory deadline 17/05/2024]
26/04/2024	EIR Response issued

Requested Information

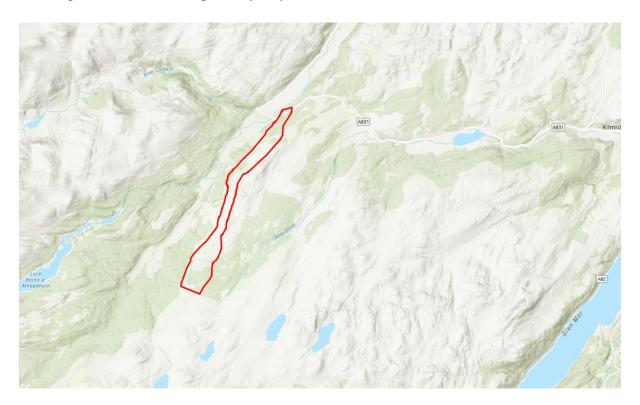
[...] near the existing Fasnakyle Substation. The approximate Grid Reference for the centre of the site is NH 32219 28423 and nearest postcode is IV4 7LZ. Please see image below for the Proposed Development (red line boundary). I have also attached Shapefiles, if that is easier.

We would be grateful if you or someone in your team would examine your available records and inform us of any information relating to potentially contaminated land within the site within a radius of no greater than 1km from the site. Information we would be looking for includes the following:

- 1. Any information relating to historical land use within and surrounding the vicinity of the site;
- Any relevant contaminated land information you may hold about the site, including pollution incidents;
- 3. Any particular areas of sensitivity in the vicinity of the site or nearby areas for which SEPA may have particular concern.

Please let us know if there is a cost for this service.

Looking forward to hearing from you/your team.



Clarification Received

Yes please, we are interested in any permits and licenses granted by SEPA, in particular CAR activities, PPC authorisations and Waste Management licences.

Response

SEPA has handled your request under the Environmental Information (Scotland) Regulations 2004 (EIRs).

 Any information relating to historical land use within and surrounding the vicinity of the site;

Please see attached: F0196906 Licences.xlsx

Personal information has been removed under Regulation 11(2) of the EIRs.

Please note that private drinking water supply abstractions of 10m³ or less are covered by a General Binding Rule (GBR). As compliance with the GBR is mandatory and no formal SEPA authorisation or registration is required, we do not hold a record of these. It is the responsibility of the local authority to maintain a register of private drinking water supplies and we suggest you contact The Highland Council for this information. Contact details are provided in 'Application of Regulation and Exceptions' section below. Regulations 10(4)(a) and 14(1)(b) apply.

Please also note, in the interest of public safety, we cannot disclose the locations of public drinking water supply abstractions. Regulation 10(5)(a) applies.

The public register documentation which SEPA held prior to December 2020 continues to be impacted by the cyber attack. We are providing you with the best information we currently have available but cannot confirm it is complete or accurate. Any use you make of this information will be at your own risk.

Please note that the Site National Grid Reference (NGR) shown on the attached spreadsheet is not necessarily the location of an abstraction point. Instead, it refers to the registered site location only. Abstraction points are found in the licence documents and are not currently held on a central database.

We hold no other information on historical land use. Regulation 10(4)(a) applies.

2. Any relevant contaminated land information you may hold about the site, including pollution incidents;

We do not hold any contaminated land information on this particular site or surrounding area. Regulation 10(4)(a) applies.

Please note, SEPA does not routinely hold this type of information. The Local Authority is the lead regulator for contaminated land and as part of its duties it is required to keep an updated inspection strategy for its area. This may include

information on previous historic contaminative uses. The Local Authority is also the lead regulator for dealing with land contamination and its remediation through planning. Therefore, we recommended you contact the Highland Council on this matter. Contact details can be found in the 'Application of Regulations and Exceptions' section below. Regulation 14(1)(b) applies.

We have found no records of pollution incidents in the requested area. Regulation 10(4)(a) applies.

3. Any particular areas of sensitivity in the vicinity of the site or nearby areas for which SEPA may have particular concern.

This information can be found on the NatureScot website here: sitelink.nature.scot/home

NatureScot can also be contacted directly for more information, contact details are given below. Regulation 9 applies.

Information Officer

NatureScot

Battleby

Redgorton

Perth

PH1 3EW

Email: foi@nature.scot

www.nature.scot/about-naturescot/access-information-and-services/access-

information/freedom-information-requests

You can also check waterbody status to identify any downgraded water bodies in the area that maybe of concern using the Water Classification Hub.

Waterbody specific information for surface waters and groundwaters can be found here: www.sepa.org.uk/data-visualisation/water-classification-hub/

- Guide to using the hub: www.sepa.org.uk/media/330145/classification-hub-quick-guide.pdf
- o Please note this is updated annually.

Regulation 6(1)(b) applies.

Further information regarding the regulations and any exceptions applied to this information can be found below.

Application of Regulations and Exceptions

Section 39(2)

The information you are requesting is environmental information. We have applied Section 39(2) of the Freedom of Information (Scotland) Act 2002 (FOISA). We are therefore handling your request under the Environmental Information (Scotland) Regulations 2004 (EIRs).

Regulation 6(1)(b) Publicly Available and Easily Accessible

Where we have advised above that information is publicly available & easily accessible Regulation 6(1)(b) applies, the text of which is reproduced below;-

6(1) Where an applicant requests that environmental information be made available in a particular form or format, a Scottish public authority shall comply with that request unless- (b) the information is already publicly available and easily accessible to the applicant in another form or format.

Regulation 9 – Advice and assistance

Where we have issued additional information or advice this is provided in line with SEPA's duty to advise and assist under Regulation 9 of The Environmental Information (Scotland) Regulations 2004.

Regulation 10(4)(a) - Information not held

Where we have advised above that SEPA does not hold this information it is excepted under Regulation 10(4)(a) of the Environmental Information Regulations 2004. The text of which is reproduced below;

(4) A Scottish public authority may refuse to make environmental information available to the extent that;- (a) it does not hold that information when an applicant's request is received.

The exception in regulation 10(4)(a) is subject to the public interest test in regulation 10(1)(b) of the EIRs. As SEPA does not hold the information in question there is no conceivable public interest in requiring that the information be made available.

Regulation 10(5)(a) – International relations, national security, public safety

The locations of public drinking water supply abstractions are withheld from release under the terms of Regulation 10(5)(a) of the EIRs. The text of which is reproduced below.

10 (5) A Scottish public authority may refuse to make environmental information available to the extent that its disclosure would, or would be likely to, prejudice substantially, (a) international relations, defence, national security or public safety;

The Public Interest Test was carried out in relation to the information which is to be withheld under Regulation 10(5)(a) of the EIRs. It is acknowledged that there are public interest arguments in favour of disclosure of the subject information. However, there is a stronger public interest in withholding information that if disclosed would likely to prejudice substantially public safety in providing the locations of the public's drinking water supplies.

Regulation 11(2) – Personal data

Personal data relating to SEPA staff and private individuals has been redacted from the released documents in accordance with Regulation 11(2) of the EIRs and Data Protection Principles. SEPA has not withheld complete documents which contain such personal data and have released all other information within the document.

Regulation 14(1)(b) – Other authority

As confirmed above SEPA does not hold this information. In accordance with the terms of the EIRs regulation 14(1)(b), The text of which is reproduced below.

14(1) Where a Scottish public authority has received a request to make environmental information available and does not hold that information but believes

that another public authority holds the information requested then it shall (b) supply the applicant with the name and address of that other authority,

We advise that you contact:

Freedom of Information Officer

The Highland Council

Headquarters

Glenurquhart Road

Inverness

IV3 5NX

 $www.highland.gov.uk/info/704/data_protection_and_freedom_of_information/340/freedom_of_information$

What to expect when making a Request for Information

Each request for information, under The Environmental Information (Scotland) Regulations 2004 or the Freedom of Information (Scotland) Act 2002, is formally logged by the authority. The request falls within a process that has two internal stages carried out by the authority; a right of appeal to the Scottish Information Commissioner followed by an appeal to the Court of Session on a point of law only.

- Stage 1 Request for information
- Stage 2 Formal Review
- Stage 3 Appeal for decision by Scottish Information Commissioner (OSIC)
- Stage 4 Appeal to the Court of Session on a point of law only.

Each enquiry will have a unique Reference Number which should be quoted when you contact us.

How you will be kept informed

You will receive an acknowledgement for your request and Formal Review. We aim to reply to all enquiries promptly, within 20 working days. You will receive a response along with the requested information and/or an explanation regarding any withheld information. We may also contact you if we require clarification or if we are issuing a fees notice.

What happens once your enquiry has been responded to?

If you are not happy with the response or have failed to receive a response, you have the right to request a Formal Review from SEPA.

Guidance on your rights and how to ask for a review is on the Scottish Information Commissioner's website; http://itspublicknowledge.info/YourRights/Askingforareview.aspx

We will ensure that all personal data is processed, recorded and retained in accordance with the requirements of the Data Protection Act 2018 throughout the handling of each request. You have a right to see information about yourself via submitting a Subject Access Request under the Data Protection Act 2018.

What to do if you are not happy with how your enquiry and review were handled

If you are unsatisfied with our Formal Review response or have failed to receive a response, you can then appeal to the Scottish Information Commissioner via the links below.

www.itspublicknowledge.info/appeal
http://www.itspublicknowledge.info/home/ContactUs/ContactUs.aspx

Should you wish to appeal against the Scottish Information Commissioner's decision, you have the right to appeal to the Court of Session on a point of law only. Any such appeal must be made within 42 days after the date of intimation of the decision.



Océane Mbaguta
Graduate Environmental
Scientist
AECOM
177 Bothwell Street
GLASGOW
G2 7ER

Please ask for: Email: Our Ref: Date: Scott Barclay
scott.barclay@highland.gov.uk
24/07
12 April 2024

Dear Océane

FASNAKYLE SUBSTATION NATIONAL GRID REFERENCE: 230747: 824403

Thank you for your Environmental Information Request for the above site received by this service on 19 March 2024. Having examined the following Ordnance Survey, Pre-War County Series maps and service records, I am now able to provide the following information in answer to your specific questions:

 Any recorded current or historical environmental problems at the site and adjacent areas with regards to ground contamination or solid waste arisings;

Having reviewed our collection of historical maps and database of potentially contaminative sources, I can confirm that we hold records of two potential sources of contaminated land within your study boundary – as detailed below:

- Borrow Pit/ Workings Our Ref: 24-MIN-2003 centred at National Grid Reference 232365: 827693. Sourced from our current OS Maps and also from Planning Application 10/01752/FUL Borrow pit for the extraction of crushed rock material for construction of new temporary and upgraded existing access tracks Land 1.3KM E Of Lillieoak, Tomich, Cannich. Documents publicly available in support of this Planning Application can be viewed via the Council's WAM link: https://wam.highland.gov.uk/wam/ you can enter the Planning Application Reference in the Search box and click 'Search'.
- Quarry Our Ref: 24-MIN-2004 centred at National Grid Reference 230831: 823944. Sourced from our Historical Maps E5c Scale 1: 10560 and Epochm7 Scale 1: 10000 both dated 1971 and Current OS Mastermap. The feature is labelled as 'Quarry (dis)' on the 1971 maps but then labelled as 'Quarry' in the Current OS Mastermap.

We hold no details of any potentially contaminative sources within the immediate surrounding land to your study site. Furthermore, we hold no details of any current/former landfills offsite within 250m.

Other than the two potentially contaminative sources identified onsite within your study site, we are not aware of any recorded current or historical environmental problems at the site and adjacent areas with regards to ground contamination or solid waste arisings.

• The presence and location of any historical landfills within 500m of the site boundary;

Having consulted our records, we hold no details of any historical landfills within 500m of the site boundary.

• Any particular areas of sensitivity in the vicinity of the site or nearby areas for which the council may have particular concern;

Having consulted our Ecology GIS map layers, we hold details of the following ecologically sensitive areas within 250m of the site:

<u>Special Protection Areas</u> – 0 sites

Special Areas of Conservation – 0 sites

Sites of Special Scientific Interest - 0 sites

RAMSAR Wetlands of International Importance – 0 sites

• Any other relevant environmental information you may hold about the site. We hold no further relevant environmental information about the site.

The Council cannot be held liable for any error or omission contained within this report, nor does the information represent or replace the requirement of a site investigation. Your Information Request has been quoted at an hourly rate of £81 plus VAT – please note that this charge has now increased to £87 plus VAT per hour as for any new Information Requests received after 1 April 2024 for the new financial year. Given that we received your Information Request prior to 1 April 2024, you will be charged at the hourly rate of £81 plus VAT. In this instance, one (1) hour was taken to prepare this information request. An Invoice for £81 plus VAT shall be raised by colleagues in Business Support. I hope the information presented is of interest.

Should you have any queries, please do not hesitate to contact me on 01463 644599.

Yours sincerely

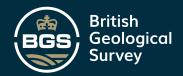
Scott Barclay

Information Technician (Contaminated Land)

Environmental Health welcomes your feedback. Please help us improve our service by taking our short customer survey by clicking on this link https://www.surveymonkey.com/s/highlandeh

Authorisation No Site	Authorisation Stat	us Authorisation Status Da	te Legislatio	n Category	Authorisation Holder	Authorisation Activity	Site NGR
CAR/L/1002065 Cannich Village Cannich Village, Beauly	Granted	April 1, 2006	CAR	Licence	SCOTTISH WATER	Bed Reinforcement; Sewage (Public) Primary; Sewage (Public) Combined Sewer Overflow (CSO)	NH 34533 31522
CAR/L/1112022 Allt Currachan Hydro Scheme, near Tomich GUISACHAN ESTATE, NEAR TOMICH	Granted	October 10, 2013	CAR	Licence	PRIVATE CONTACT	Abstraction Hydropower; Impoundment Hydropower; Abstraction Return	NH 31200 27740
CAR/R/1013050 The Old Brewery, Tomich, Beauly THE OLD BREWERY, TOMICH, BEAULY IV4 7LY	Granted	September 13, 2006	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31068 27672
CAR/R/1015685 Riverside Cottage, Nr Kerrow House, Cannich RIVERSIDE COTTAGE, NR KERROW HOUSE, CANNICH, BEAULY IV4 7NA	Granted	December 12, 2006	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 32827 30590
CAR/R/1015686 Fishermans Cottage & Kerrow House, Cannich FISHERMANS COTTAGE &, KERROW HOUSE, CANNICH, Beauly IV4 7NA	Granted	December 7, 2006	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 32962 30633
CAR/R/1017987 Fasnakyle Power Station, Cannich FASNAKYLE POWER STATION, CANNICH IV4 7NB	Granted	April 18, 2007	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31870 29596
CAR/R/1019982 The Keepers Cottage, Kerrow, Cannich the keepers cottage, KERROW, CANNICH, Beauly IV4 7NA	Granted	July 13, 2007	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 33230 30410
CAR/R/1024228 Fasnakyle Water Supply, Fasnakyle Village FASNAKYLE WATER SUPPLY, FASNAKYLE VILLAGE, STRATHGLASS	Granted	February 11, 2008	CAR	Registration	n GREGORY'S PLANT HIRE & CIVIL ENGINEERING	Pipeline / Cable Crossing	NH 31750 28860
CAR/R/1042450 Comar Lodge, Cannich IV4 7NB COMAR LODGE, CANNICH, BEAULY IV4 7NB	Granted	June 25, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 33290 31310
CAR/R/1045883 Birchwood House, Kerrow, Beauly Birchwood House, Kerrow, Beauly IV4 7NA	Granted	June 12, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 33854 30836
CAR/R/1047179 Invercannich House, by Beauly INVERCANNICH HOUSE, CANNICK, BY BEAULY, INVERNESS SHIRE IV4 7LS	Granted	May 29, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 34536 32102
CAR/R/1064963 Balmore Cottage, Beauly BALMORE COTTAGE, BEAULY IV4 7LS	Granted	June 12, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 35164 32733
CAR/R/1066062 Garage Flat, Birchwood House, Kerrow, Beauly GARAGE FLAT, BIRCHWOOD HOUSE, KERROW, BEAULY IV4 7NA	Granted	June 12, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 33854 30824
CAR/R/1069119 Achnahegleish, Guisachan Farm, Tomich, Beauly ACHNAHEGLEISH, GUISACHAN FARM, TOMICH, By Beauly IV4 7LY	Granted	October 21, 2009	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Tertiary	NH 31325 26965
CAR/R/1087657 Crimmond, Cannich, Beauly Crimmond, Cannich, BEAULY IV4 7LT	Granted	September 20, 2010	CAR	Registration	n MACANDREW AND JENKINS	Sewage (Public) Primary	NH 34184 31635
CAR/R/1093246 Mill Cottage, Cannich, Beauly Mill Cottage, Cannich, BEAULY IV4 7LT	Granted	May 18, 2011	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 34165 31674
CAR/R/1093979 Proposed Dwelling, Plot 1 The Old Brewery Seasons View Tomich, Inverness-shire, Cannich IV4 7LY	Granted	June 13, 2011	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31230 26990
CAR/R/1102135 Eng Wks @ BF Access Track Spur 10N, Guisachan BF 76 Access Track Spur 10N, Guisachan Forest, Guisachan	Granted	April 25, 2012	CAR	Registration	n PRIVATE CONTACT	Bridging Culvert	NH 30440 24730
CAR/R/1105326 The Brewers Cottage, Tomich, by Cannich THE BREWERS COTTAGE, TOMICH, CANNICH, BEAULY IV4 7LY	Granted	August 3, 2012	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31067 27685
CAR/R/1105400 Corrimony Wind Farm Grid Connection 299-301 Duke Street, Barrow in Furness LA14 5UL	Granted	August 14, 2012	CAR	Registration	n FREEDOM AGRILEK	Pipeline / Cable Crossing	NH 32100 29490
CAR/R/1105401 Corrimony Wind Farm Grid Connection 299-301 Duke Street, Barrow in Furness LA14 5UL	Granted	August 14, 2012	CAR	Registration	n FREEDOM AGRILEK	Pipeline / Cable Crossing	NH 32100 29490
CAR/R/1105402 Corrimony Wind Farm Grid Connection 299-301 Duke Street, Barrow in Furness LA14 5UL	Granted	August 14, 2012	CAR	Registration	n FREEDOM AGRILEK	Pipeline / Cable Crossing	NH 32100 29490
CAR/R/111539 The Bothy, Fasnakyle, Glen Affric Rd, Cannich The Bothy, Fasnakyle, Glenaffric Road, Cannich IV4 7NB	Granted	May 7, 2013	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31340 28900
CAR/R/111966 Rivendell House, Fasnakyle, Beauly Rivendell, Fasnakyle, BEAULY IV4 7NB	Granted	May 24, 2013	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31660 29300
CAR/R/1125667 New House, E of Lodge Cot, Fasnakyle, Cannich East of Lodge Cottage, Fasnakyle, Cannich	Granted	September 11, 2014	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31630 29280
CAR/R/1142459 Kerrow Burn Eng Wks, Cannich, By Beauly A831, Cannich by Beauly IV47LJ	Granted	December 15, 2015	CAR	Registration	n PRZEMYSLAW WUWER	Bridging Culvert	NH 34510 31310
CAR/R/1147530 Blue Roan, Cannich, Beauly Blue Roan, Cannich, Beauly IV4 7LS	Granted	June 10, 2016	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 34125 31985
CAR/R/1149047 Dunromin, Cannich Dunromin, Cannich IV4 7LS	Granted	July 27, 2016	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 34230 32009
CAR/R/1159387 Conversion of Balcladaich Sawmill, Cannich Conversion of Balcladaich Sawmill, Tomich, Cannich IV4 7LY	Granted	July 17, 2017	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 29924 26110
CAR/R/1161046 Lillieoak, Tomich, Beauly Lillieoak, Tomich, Strathglass, Beauly IV4 7LY	Granted	September 14, 2017	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31271 27944
CAR/R/1172253 Birchwood + Rowan Cottages, Cannich, Beauly Birchwood + Rowan Cottages, Kerrow House, Cannich, Beauly IV4 7NA	Granted	September 25, 2018	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 32907 30611
CAR/R/1173101 Hillcrest, Tomich, Strathglass, Inverness Hillcrest, Tomich, Strathglass, Inverness IV4 7LY	Granted	October 12, 2018	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31271 27987
CAR/R/1175136 Kirkfield, Tomich Kirkfield, Tomich IV4 7LY	Granted	December 11, 2018	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Primary	NH 31277 27155
CAR/R/1183138 New House at Fasnakyle, Cannich New House at Fasnakyle, Cannich IV4 7NB	Granted	June 24, 2019	CAR	Registration	n PRIVATE CONTACT	Sewage (Private) Secondary	NH 31972 29438
CAR/R/3004358 POSTMANS COTTAGE CANNICH BEAULY IV4 7NE	Granted	April 21, 2022	CAR	Registration	n	Point Source - Existing Sewage Treatment System (PSTS)	NH 35809 32339
CAR/R/3011453 BALQUIDDER KERROW CANNICH BEAULY IV4 7NA	Granted	September 25, 2023	CAR	Registration	n	Point Source - Existing Sewage Treatment System (PSTS)	NH 33046 30385
CAR/R/5005367 Grey Bank Repairs at Fasnakyle Power Station, IV4 7NB	Granted	June 14, 2023	CAR	Registration	n SSE Renewables	Engineering - Grey bank restoration / reprofiling	NH 3194 2962
CAR/R/5005839 Postman's Cottage, Cannich, Beauly, IV4 7NE	Granted	July 25, 2023	CAR	Registration	n	Point Source - New Sewage Treatment System to Water	NH 3581 3234
PPC/B/1102945 Gregory's Plant Hire - Mobile Plant Chairein Lodge, Cannich, By Beauly, Inverness-Shire IV4 7LT	Granted	August 17, 2012	PPC	Licence	GREGORYS PLANT HIRE	3.5(a)	NH 33894 31403
PSTS/cdb532 Challenger Lodge, Tomich, Cannich, Beauty, IV4 7LY	Granted	July 8, 2021	CAR	Registration	n	Point Source - Existing Sewage Treatment System (PSTS)	NH 29853 25981
WML/XS/2000306 CHAIREIN LODGE, CANNICH, BEAULY, IV47LT	Granted	July 2, 2021	Waste	Exemption	Gregory's Plant & Civils	Paragraph 30 - Burning plant tissue waste on land in the open	NH 33897 31405

Appendix F BGS Borehole Records





Beauly - Denny 400kv OHL

Borehole No BF74B-A Sheet 1 of 2 Status Final 29/11/2011

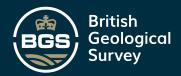
Client: Scottish & Southern Energy plc

Consultant: Balfour Beatty Utility Solutions

Date Started	14/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E 230955.087 m National Grid
Date Complete:	15/10/2011	Initial Core Diameter	86mm		N 825428.835 m National Grid
Hole Type:	RO+RC	Rotary Casing Type	Robit	Ground Level:	260.20 m OD
Equipment:	DB520 Boart	Core Barrel: Core Bit:	T2-101 Diamond Impreg	Plunge: Scale:	90 ° 1:50

	Core Bit:			Diamond I	mpreg	Scale:		1:50			
Description of Strata		Legend	Depth	Reduced Level	Sampling Core Ru		υ \square	n Situ Testing	TCR (SCR) RQD	FI	Instali
ery soft spongy dark brown pseudo-fibrous PEAT/	г.	sales sales sales significant sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales sales						St. (Kesult	INGO		
SAND & GRAVEL. (Driller's description)		a side, side	1.10	259.10				(S)			pó
Very strong grey fine to medium grained PSAMMI slightly weathered with some yellowish brown stain on fractures. Occasional micaceous bands. Beddli fractures are inclined between 20deg and 30deg a very closely to closely spaced, planar, smooth, tig and frequently micaceous.	ning ng and are		1.70	258.50	1.7	0-3.00	10		100 (94) 75	7	
From 3.00m to 4.30m, with frequent pinkish white crystalline quartz bands.	.					0-3.50			100 (0) 0 100 (16) 0	NI	
From 4.30m, locally more weathered with some wand broken bands and patches of orangish brown staining. Dark grey in colour. Sub vertical and subnorizontal fractures.			}}}}			0-5.00 0-6.50		6)	100 (0) 0 100 (70) 27	12	
From 6.00m to 6.50m, becomes medium strong tand micaceous. From 6.50m, with some occasional bands of crysquartz.	•		******		6.8	50-7.70		(0)	100 (79) 63		
Continued next sheet			*****		7.5	70-8.00			100 (100)		

Contin	iuea nexi sneet		MANANT.			100
U P TW D	Undisturbed U100 / U86 Sample Piston Sample Thin Wall Sample Small Disturbed Sample	TCR SCR RQD FI	Core Run Total Core Recovery Solid Core Recovery Rock Quality Designation Fracture Index	S C 32 /175 /25#	Standard Penetration Test Cone Penetration Test N for full 300mm penetration For given penetration (mm) Seating blows only (mm)	CP Cable Percussion RO Rotary Open Hole RC Rotary Cored SO Sonic Open holed CONP Continuous Percussion
В	Bulk Disturbed Sample	NI	Non Intact	PP	Pocket Penetrometer Test	WLS Windowless Sampler
LB W G C J V	Large Bulk Disturbed Sample Water Sample Gas Sample Core Amber Jar Sample Vial Sample	U* UT NA NR NP	Blows to drive U100 / U86 Thin wall undisturbed sample Not Applicable No Recovery No Penetration	K L IV IVR HV HVR	Permeability Test (m/s) Packer Test (Lugeons) Insitu Vane Test. Peak Insitu Vane Test. Residual Hand Vane Test. Residual Hand Vane Test. Residual	Installation Slotted Pipe Piezometer Tip Grout Grout Grout Grout Gravel Filter





BOREHOLE LOG

Beauly - Denny 400kv OHL

Borehole No BF74B-A Sheet 2 of 2 Status Final 29/11/2011

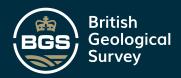
Scottish & Southern Energy plc Client:

Balfour Beatty Utility Solutions Consultant:

Job No: 4578

Date Started	14/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E	230955.087 m National Grid
Date Complete:	15/10/2011	Initial Core Diameter	86mm		N	825428.835 m National Grid
Hole Type:	RO+RC	Rotary Casing Type	Robit	Ground Level:	260	.20 m OD
Equipment:	DB520 Boart	Core Barrel: Core Bit:	T2-101 Diamond Impreg	Plunge: Scale:	90 ° 1:50)

Description of Strata		Legend	Depth	Reduced Level	Sampling/ Core Run	U	In Situ Test	Testing Result	TCR (SCR) RQD	FI	Install -ation
ry strong grey fine to medium grai htty weathered with some yellowi fractures. Occasional micaceous ctures are inclined between 20de ry closely to closely spaced, plana d frequently micaceous.	sh brown staining bands. Bedding g and 30deg and are		-		8.00-9.50				100 (83) 77	5	
					9.50-10.20		36		100 (93) 71	8	
			-		10.20-10.70				100 (100)		
			- -		10.70-11.70				100 100 (100) 85	6	
			See		11.70-12.70				100 (90) 75		
			- - - - - -		12.70-13.70				100 (90) 60	9	
nd of Borehole at 13.70 m			-13.70 - - - - - - -	246.50		(3	30				
	♣ Core Run		s	Stand	ard Penetration Test		СР	Cable Perc	noissur		
Undisturbed U100 / U86 Sample Piston Sample Thin Wall Sample	TCR Total Core R SCR Solid Core R RQD Rock Quality	ecovery	C 32 /175	Cone N for t	Penetration Test ull 300mm penetration ven penetration (mm)		RO RC SO	Rotary Ope Rotary Cor Sonic Ope	en Hole red		
Small Disturbed Sample Bulk Disturbed Sample Large Bulk Disturbed Sample		ex e U100 / U86 listurbed sample	/25# PP K L	Pocke Perme	g blows only (mm) t Penetrometer Test ability Test (m/s) r Test (Lugeons)		CONP WLS Install:	Windowles	s Sample		er
Water Sample Gas Sample	NA Not Applicat		IV IVR	Insitu	Vane Test. Peak Vane Test, Residual	İ		Piezometer Tip		entonite	





Beauly - Denny 400kv OHL

Borehole No
BF74B-B
Sheet 1 of 1
Status
Final

Client: Scottish & Southern Energy plc

Consultant: Balfour Beatty Utility Solutions

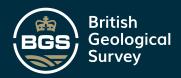
29/11/2011 Job No: 4578

D	ate Started	15/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E	230962.005 m National Grid
D	ate Complete:	15/10/2011	Initial Core Diameter			N	825423.002 m National Grid
Н	lole Type:	RO	Rotary Casing Type	Robit	Ground Level:	260	.57 m QD
E	quipment:	DB520 Boart	Core Barrel: Core Bit:)	Plunge: Scale:	90 ° 1:50	

	Core Bit:			Scale:			1:50			
Description of Strata	Legend	Depth	Reduced Level	Sampling/ Core Run	U	In Situ	Testing Result	TCR (SCR) RQD	Fl	Install
Very soft spongy dark brown pseudo-fibrous PEAT.	aller, able, av c, able,	164 - 1 164 - 1 166 - 1 166 - 1				1000				ALL CANADA OF FRANCE
SAND & GRAVEL. (Driller's description)		4.00	259.57			OC OC				4.00
PSAMMITE. (Driller's description) (Open holed)		2.80	257.77							

End of Borehole at 6.00 m		6.00	254.57		(35				
U Undisturbed U100 / U86 Sample TOP Total	Run	S C	Standa	ard Penetration Test		СР	Cable Pe	rcussion		

U Undisturbed U100 / U86 Sample P Piston Sample TW Thin Wall Sample D Small Disturbed Sample B Bulk Disturbed Sample	TCR SCR RQD FI NI	Core Run Total Core Recovery Solid Core Recovery Rock Quality Designation Fracture Index Non Intact	S C 32 /175 /25# PP	Standard Penetration Test Cone Penetration Test N for full 300mm penetration For given penetration (mm) Seating blows only (mm) Pocket Penetrometer Test	CP RO RC SO CONP WLS	Cable Percussion Rotary Open Hole Rotary Cored Sonic Open holed Continuous Percussion Windowless Sampler
LB Large Bulk Disturbed Sample W Water Sample G Gas Sample C Core J Amber Jar Sample V Vial Samole	U* UT NA NR NP	Blows to drive U100 / U86 Thin wall undisturbed sample Not Applicable No Recovery No Penetration	K L IV IVR HV HVR	Permeability Test (m/s) Packer Test (Lugeons) Insitu Vane Test. Peak Insitu Vane Test. Residual Hand Vane Test. Peak Hand Vane Test. Residual	III P	Iotted Pipe Sand Filter iezometer Tip Bentonite Seal Filter Gravel Filter concrete





Beauly - Denny 400kv OHL

Borehole No
BF74B-C
Sheet 1 of 1
Status
Final
29/11/2011

Client:

Scottish & Southern Energy plc

Consultant: Balfour Beatty Utility Solutions

Job No: 4578

Date Started	15/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E	230956,253 m National Grid
Date Complete:	15/10/2011	Initial Core Diameter			N	825416.106 m National Grid
Hole Type:	RO	Rotary Casing Type	Robit	Ground Level:	259.	96 m OD
Equipment:	DB520 Boart	Core Barrel:		Plunge:	90°	
		Core Bit:		Scale:	1:50	ı

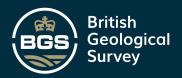
	Core Bit:			S	cale:	1:50			
Description of Strata	Lege		Reduced Level	Sampling/ Core Run	U	In Situ Testing Test Result	TCR (SCR) RQD	FI	Instal
Very soft spongy dark brown fibrous PEAT.	able ad able and able an	arte les artes and a construction de la constructio				, same			
SAND & GRAVEL. (Driller's description)		1.00	258.96			(S)			v
PSAMMITE. (Driller's description) (Open holed)		1.80	258.16						
End of Borehole at 6.00 m		6.00	253.96			306)			
Undisturbed U100 / U86 Sample TCR Tot Piston Sample SCR Sol	re Run al Core Recovery id Core Recovery	S C 32	Cone N for	dard Penetration Test Penetration Test full 300mm penetration (m	ition				

U	Undisturbed U100 / U86 Sample
Р	Piston Sample
ΓW	Thin Wall Sample
D	Small Disturbed Sample
В	Bulk Disturbed Sample
LB	Large Bulk Disturbed Sample
W	Water Sample
G	Gas Sample
С	Core
J	Amber Jar Sample
V	Vial Sample

Ni U* UT

	Core Run	s	Standard Penetration Test
_	•		•
₹	Total Core Recovery	C	Cone Penetration Test
2	Solid Core Recovery	32	N for full 300mm penetratio
D	Rock Quality Designation	/175	For given penetration (mm)
	Fracture Index	/25#	Seating blows only (mm)
	Non Intact	PP	Pocket Penetrometer Test
	Blows to drive U100 / U86	К	Permeability Test (m/s)
	Thin wall undisturbed sample	L	Packer Test (Lugeons)
	Not Applicable	IV	Insitu Vane Test. Peak
	No Recovery	IVR	Insitu Vane Test. Residual
	140 Newvery	HV	Hand Vane Test. Peak
	No Penetration	HVR	Hand Vane Test. Residual

RO	Rotary Ope	n Hole
RC	Rotary Core	d
so	Sonic Open	holed
CON	P Continuous	Percussion
WLS	Windowless	Sampler
Instal	lation	
	Slotted Pipe '	Sand Filter
	Piezometer Tip	Bentonite Seal
	Grout	Gravel Filter
震温	Concrete	





Beauly - Denny 400kv OHL

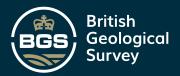
Borehole No BF75-C Sheet 1 of 2 Status Final 29/11/2011

Client: Scottish & Southern Energy plc
Consultant: Balfour Beatty Utility Solutions

ſ	Date Started	24/10/2011	Initial Boring Diameter:	160mm	Coordinates;	E 230643.500 m National Grid
l	Date Complete:	25/10/2011	Initial Core Diameter	84mm		N 825052.000 m National Grid
١	Hole Type:	RC	Rotary Casing Type	Robit	Ground Level:	274.47 m OD
ŀ	Equipment:	DB520 Boart	Core Barrel:	T2-101	Plunge:	90°
4			Core Bit:	Diamond Impreg	Scale:	1:50

Description of Strata Legend Depth Reduced Level Sampling/Core Run Very soft spongy dark brown pseudo-fibrous PEAT. SAND & GRAVEL. (Driller's description) Very strong locally extremely strong grey fine grained PSAMMITE, mostly fresh occasionally slightly weathered with some yellowish brown staining. Some bands of crystalline quartz and sub vertical mineral veins and occasional micaceous bands. Bedding fractures are inclined between 20deg and 30deg and are closely to medium spaced, planar, smooth, tight and clean.	U Test	Situ Testing (SCR) t Result RQD	FI	Instal -ation
SAND & GRAVEL. (Driller's description) Very strong locally extremely strong grey fine grained PSAMMITE, mostly fresh occasionally slightly weathered with some yellowish brown staining. Some bands of crystalline quartz and sub vertical mineral velns and occasional micaceous bands. Bedding fractures are inclined between 20deg and 30deg and are closely to medium spaced, planar, smooth, tight and clean.		100 (100)		ాడ్ -
Very strong locally extremely strong grey fine grained PSAMMITE, mostly fresh occasionally slightly weathered with some yellowish brown staining. Some bands of crystalline quartz and sub vertical mineral veins and occasional micaceous bands. Bedding fractures are inclined between 20deg and 30deg and are closely to medium spaced, planar, smooth, tight and clean.	-2.80	(100)		.,S
closely to medium spaced, planar, smooth, tight and clean.		1 1	1	
4.30-8	-4.30	100 (85) 67	3	
	-5.80	100 (65) 65	3	
From 5.65m to 7.30m, becomes pinkish white crystalline quartz.	-7.30	100 (33) 20	12	
From 7.30m to 7.80m, interbanded psammite and crystalline quartz with weathering along the ractures.	-8.80	100 (60) 30	15	

U P TW	Undisturbed U100 / U86 Sample Piston Sample Thin Wall Sample	TCR SCR RQD	Core Run Total Core Recovery Solid Core Recovery Rock Quality Designation	S C 32 /175	Standard Penetration Test Cone Penetration Test N for full 300mm penetration For given penetration (mm)	RO Rotary RC Rotary	Percussion Open Hole Cored
D B LB	Small Disturbed Sample Bulk Disturbed Sample Large Bulk Disturbed Sample	FI NI U*	Fracture Index Non Intact Blows to drive U100 / U86	/25# PP K	Seating blows only (mm) Pocket Penetrometer Test Permeability Test (m/s)	CONP Contin WLS Windo	Open holed uous Percussion wless Sampler
W G C	Water Sample Gas Sample Core Amber Jar Sample	UT NA NR	Thin wall undisturbed sample Not Applicable No Recovery	IV IVR HV	Packer Test (Lugeons) Insitu Vane Test. Peak Insitu Vane Test. Residual Hand Vane Test. Peak	Slotted Pip Piezomete Grout	21 Sand Filter
v	Vial Sample	NP	No Penetration	HVR	Hand Vane Test. Residual	Concrete	121





Beauly - Denny 400kv OHL

Borehole No BF75-C Sheet 2 of 2 Status

Final 29/11/2011

Job No: 4578

Scottish & Southern Energy plc Client:

Balfour Beatty Utility Solutions Consultant:

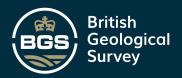
Vial Sample

Date Started Initial Boring Diameter: 160mm Coordinates: E 230643.500 m National Grid 25/10/2011 Date Complete: Initial Core Diameter 84mm N 825052.000 m National Grid Hole Type: Rotary Casing Type 274.47 m OD DB520 Boart Equipment: Core Barrel: Plunge: 90°

Equipment: DB520 Boart	Core Barrel: Core Bit:		3	Diamond In	npreg Plung Scale:		90° 1:50			
Description of Strata		Legend	Depth	Reduced Level	Sampling/ Core Run	U	In Situ Testing Test Result	TCR (SCR) RQD	Fi	Insta -atio
Very strong locally extremely strong PSAMMITE, mostly fresh occasion weathered with some yellowish brow bands of crystalline quartz and sub veins and occasional micaceous bar fractures are inclined between 20de closely to medium spaced, planar, sclean. From 8.80m, with some closed sub fractures and occasional sub vertical altered mineral coatings.	ally slightly rn staining. Some vertical mineral rds. Bedding g and 30deg and are smooth, tight and vertical undulating				8.80-10.30			100 (40) 17	6	4,76
			-		10.30-11.30	•		100 (62) 40		-
					11.30-12.80			100 (80) 64	7	
End of Borehole at 13.30 m			-13.30	261.17	12.80-13.30	,		100 (80) 62		
							8G S)			
Undisturbed U100 / U86 Sample Piston Sample W Thin Wall Sample Small Disturbed Sample Bulk Disturbed Sample Large Bulk Disturbed Sample W Water Sample G Gas Sample C Core	Core Run TCR Total Core Recovery SCR Solid Core Recovery RQD Rock Quality Designat FI Fracture Index No Intact U* Blows to drive U100 / I UT Thin wall undisturbed NA Not Applicable NR No Recovery	J86	S C 32 /175 /25# PP K L IV	Cone F N for fu For giv Seating Pocket Permea Packer Insitu V	rd Penetration Test renetration Test Ill 300mm penetration en penetration (mm) penetration (mm) Penetrometer Test ability Test (m/s) Test (Lugeons) fane Test. Peak fane Test. Residual		CP Cable Per RO Rotary Op RC Rotary Co SO Sonic Ope CONP Continuou WLS Windowlet Installation I Slotted Pipe II Piezometer Tip Grout	en Hole red en holed s Percussi ss Sample [2] San		

Concrete

Hand Vane Test. Peak Hand Vane Test. Residual





Beauly - Denny 400kv OHL

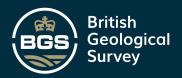
Borehole No BF78-A Sheet 1 of 2 Status Final 18/06/2012

Client: Scottish & Southern Energy pic
Consultant: Balfour Beatty Utility Solutions

Date Started	10/03/2012	Initial Boring Diameter:	160mm	Coordinates:	E 230037,600 m National Grid
Date Complete:	10/03/2012	Initial Core Diameter	86mm		N 823930,400 m National Grid
Hole Type:	RC	Rotary Casing Type	Robit	Ground Level:	310.20 m OD
Equipment:	Boart DB520	Core Barrel:	T2101	Plunge:	90 *
		Core Bit:	Diamond impreg	Scale:	1:50

Description of Strata	Legend	Depth	Reduced Level		npling/ re Run	U		u Testing	TCR (SCR)	FI	fnstail*
MADE GROUND: Dark grey sub angular to angular cobbles and boulders of psammite.		0.40	309.80				Test	Result	RQD		
Dark brown locally grey fine to coarse SAND and sub angular to angular fine to coarse GRAVEL of psammite with occasional sub angular to angular cobbies of psammite.				D	1.00						goli
Badly broken PSAMMITE (Driller's Description) (open holed).		1.10	309.10	D	1.00		36				
Very strong grey and locally dark grey fine to medium grained PSAMMITE, mostly fresh with some mineral infill and surface staining along joints and fractures. Occasional micaceous bands and thinly		2.50	307.70		2.50-3.50				100 (25) 20	NI	
follated mica schist bands throughout. 10-15mm crystalline quartz veins throughout. Joints are inclined between 74deg and 85deg, closely spaced, planar, smooth, tight with dark green and dark grey surface staining and occasional crystalline quartz infill.				_	3.50-4.50				100 (0) 0	4 6	
				-	4.50-5.50				100 (20)	NI.	
									10	10	
				-	5.50-6.50		36	3)	100 (75) 65	6	
					6.50-7.50				100 (60) 45	7	
Continued next sheet					7.50-8.50				100 (35) 20		
Lindisturbed Lino/Liss Semple		s	Stene	lard Pen	ekration Test		CP	Cable Percu	ussion		

Core Run TCR Total Core Recovery SCR Solid Core Recovery SCR Solid Core Recovery	S C 32	Standard Penetration Test Cone Penetration Test N for full 300mm penetration	CP RO RC	Cable Percussion Rotary Open Hole Rotary Cored
FI Fracture Index NI Non Intact	/25# PP	Seating blows only (mm) Pocket Penetrometer Test	CONP	Sonic Open holed Continuous Percussion Windowless Sampler
U* Blows to drive U100 / U86 UT Thin well undisturbed sample NA Not Applicable	IPID L IV	In-situ Photo-Ionisation Detector (pp: Packer Test (Lugeons) Insitu Vane Test, Peak	E S	Slotted Pipe Sand Filter
NR No Recovery NP No Penetration	IVR HV	Insitu Vene Test, Residual Hand Vene Test, Peak	⊠ 6	Bentonite Seal
	TCR Total Core Recovery SCR Solid Core Recovery RQD Rock Quality Designation FI Fracture Index NI Non Intact U* Blows to drive U100 / U88 UT Thin well undisturbed sample NA Not Applicable NR No Recovery	TCR	TCR Total Core Recovery C Cone Penetration Teel: SCR Solid Core Recovery 32 N for full 300mm penetration RQD Rock Quality Designation /175 For given penetration (mm) FI Fracture Index /25# Seating blows only (mm) Non Intact PP Pocket Penetrometer Test U* Blows to drive U100 / U88 IPID In-situ Photo-Ionisation Detector (ppi UT Thin wall undisturbed sample L Packer Test (Lugeons) NA Not Applicable V Insitu Vane Test, Residual NR No Recovery IVR Insitu Vane Test, Residual NP No Penetration HV Hand Vane Test, Peak	TCR Total Core Recovery C Core Penetration Toet SCR Solid Core Recovery 32 N for full 300mm penetration RC RQD Rock Quality Destination 7175 For given penetration (mm) SO FI Fracture Index 725# Seating blows only (mm) CONP NI Non Intact 1" PP Pocket Penetrometer Test 1" WLS U* Blows to drive U100 / U88 IPID In-situ Photo-lonisation Detector (ppm) Insteller UT Thin wall undisturbed sample L Packer Test (Lugeons) Insteller NA Not Applicable IV Institu Varie Test. Peak IVR Institu Varie Test. Residual IVR Hand Var





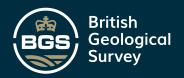
Beauly - Denny 400kv OHL

Borehole No BF78-A Sheet 2 of 2 Status Final 18/05/2012

Client: Scottish & Southern Energy ptc
Consultant: Balfour Beatty Utility Solutions

Date Started	10/03/2012	Initial Boring Diameter;	160mm	Coordinates:	E 230037,600 m National Grid
Date Complete:	10/03/2012	Initial Core Diameter	86mm		N 823930,400 m National Grid
Hole Type:	RC	Rotary Casing Type	Robit	Ground Level:	310.20 m OD
Equipment:	Boart DB520	Core Barrel:	T2101	Plunge:	90 °
		Core Bit:	Diamond Impreg	Scale:	1:50

Estat Dece	Core Bit:	Diamor	d Impreg Scale:		1:50			
Description of Strate	Legend	Depth Level	Sampling/ Core Run	U Jo	Situ Testing	TCR (SCR) RQD	FI	instell -ation
Very strong grey and locally dark grey fine to medi grained PSAMMITE, mostly fresh with some mine infill and surface staining along joints and fractures. Occasional micaceous bands and thinly foliated mica schist bands throughout. 10-15mm crystalline quartz veins throughout. Joints are inclined between 74deg and 85deg, closely spaceplanar, smooth, tight with dark green and dark gre	ral		8.50-9.50		a result	100 (10) 0	10 Ni	, els
surface staining and occasional crystalline quartz infili. At 8.50m to 10.80m, fractured bands.			9.50-10.50			100 (5) 0	Ni	
			10.50-11.5			100 (35) 30	NI	
		35)	11.50-12.5			90 (35) 30	1	
			12.50-13.5			90 (25) 25	NI. 3	
(BCC)			13.50-14.5			90 (35) 25	5	
End of Borehole at 14.40 m		14.40 295.8	0 [
P Piston Sample TCR Total TW Thin Wall Sample RQD Rock	Run Core Recovery I Core Recovery Cuelity Designation	C Cor 32 N f /175 For	nderd Penetration Test ne Penetration Test or full 300mm penetration given penetration (mm)	CP RO RO SO	Rotary Ope Rotary Core	n Hole ed		
B	ture Index Intext Intext s to drive U100 / U86 wall undisturbed sample applicable tecovery renetration in Hole Drilling	PP Poi IPID In-1 L Pac IV Insi IVR Insi HV Ha	aling blows only (mm) ket Penetrometer Test situ Photo-konisation Detect ker Test (Lugeons) itu Vane Test. Pesk itu Vane Test. Residual nd Vane Test. Residual nd Vane Test. Residual	WL	NP Continuous S Windowless tellation Slotted Pipe Plezometer Tip Grout	Percussion Sempler	id Filter Itonite S	eal





Beauly - Denny 400kv OHL

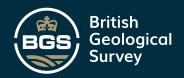
Borehole No BF79C-A Sheet 1 of 2 Status Final 20/12/2011

Client: Scottish & Southern Energy plc
Consultant: Balfour Beatty Utility Solutions

	Date Started	28/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E 229893.075 m Nationa	al Grid
L	Date Complete:	29/10/2011	Initial Core Diameter	86mm		N 823547.940 m Nationa	al Grid
	Hole Type:	RO+RC	Rotary Casing Type	Robit	Ground Level:	311.06 m OD	
1	Equipment:	DB520 Boart	Core Barrel:	T2-101	Plunge:	90°	
L			Core Bit:	Diamond Impreg	Scale:	1:50	

Very soft spongy dark brown pseudo-fibrous PEAT. Orangish brown silty gravelly fine to coarse SAND with occasional cobbles. Gravel is angular to sub rounded fine to coarse of psammite. Cobbles are angular to sub angular of psammite. Dense SAND & GRAVEL (Driller's description) (Open noted). Dense SAND (Driller's description) (Open holed). Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. Weak Drownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining.	Description of Strata		Legend	Depth	Reduced Level	Sampling/ Core Run	υ	In Situ T	esting (S	TCR SCR)	FI	Inst -ati
Orangish brown silty gravelly fine to coarse SAND with occasional cobbles. Grave is angular to sub rounded fine to coarse of psammite. Cobbles are angular to sub angular of psammite. Dense SAND & GRAVEL (Driller's description) (Open holed). Dense SAND (Driller's description) (Open holed). Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. 4.00 307.06 4.00-5.00 6.00-7.00 N 6.00-7.00 7.00-8.00 7.55 (O) N	Very soft spongy dark brown pseud	do-fibrous PEAT.	د بعادم بدادر بدادر بدادر بدادر د بدادر بدادر بدادر بدادر بدادر د بدادر بدادر بدادر بدادر					Test	Result F	RQD		
Dense SAND (Driller's description) (Open holed). 2.00 309.06 C 30 Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. 4.00 307.06 4.00 - 5.00-6.00 N - 6.00-7.00 N - 7.00-8.00	occasional cobbles. Gravel is angifine to coarse of psammite. Cobble	ular to sub rounded							5)			
Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. 4.00 307.06 A.00-5.00 N 6.00-7.00 N 7.00-8.00 N 7.00-8.00 N 7.00-8.00 N 7.00-8.00 N 7.00-8.00 N 7.00-8.00	Dense SAND & GRAVEL (Driller's holed)	description) (Open		-1.50 -	309.56			С	31			
Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. A.00 307.06 A.00-5.00 A.00-5.00 N Solution in the company of the company of the coarse gravel. Occasional patches of orange staining. N A.00-5.00 N N A.00-5.00 N N A.00-5.00 N N TO (0) N N TO (0) N N N N N N N N N N N N N	Dense SAND (Driller's description)	(Open holed).		2.00 - - -	309.06							
weak brownish grey fine to medium grained PSAMMTE, recovered as slity sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. N 5.00-6.00 N 6.00-7.00 N 70 (0) N								С	30			
Weak brownish grey fine to medium grained PSAMMITE, recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. N 5.00-6.00 N 6.00-7.00 N 70 (0) N			*****	- -4.00	307.06	4.00-5.00				65		
5.00-6.00 70 (0) 0 NI 555 (0) NI 75 (0) NI 7	ecovered as silty sandy angular to coarse gravel. Occasional patch	sub angular fine				1100 0.00				(0)	NI	
6.00-7.00 55 (0) N						5.00-6.00				(0)	NR	
7.00-8.00 (0) N)		NI	
[(0) N						0.00-7.00				300	NR	
				-		7.00-8.00				(0)	NI	
Continued next sheet Ni	Continued next sheet										NR	

COIL	inded next sneet							INIX
U P TW	Undisturbed U100 / U86 Sample Piston Sample Thin Wall Sample	TCR SCR S	Core Run Total Core Recovery Solid Core Recovery Rock Quality Designation	S C 32 /175	Standard Penetration Test Cone Penetration Test N for full 300mm penetration For given penetration (mm)	CP RO RC SO	Cable Percussion Rotary Open Hotary Cored Sonic Open hol	ole
D B	Small Disturbed Sample Bulk Disturbed Sample	NI I	Fracture Index Non Intact Blows to drive U100 / U86	/25# PP	Seating blows only (mm) Pocket Penetrometer Test	CONP	Continuous Per Windowless Sa	
LB W G	Large Bulk Disturbed Sample Water Sample Gas Sample	UT .	Thin wall undisturbed sample Not Applicable	K L IV	Permeability Test (m/s) Packer Test (Lugeons) Insitu Vane Test. Peak		ation Slotted Pipe	Sand Filter
A C	Core Amber Jar Sample Vial Sample		No Recovery No Penetration	IVR HV HVR	Insitu Vane Test. Residual Hand Vane Test. Peak Hand Vane Test. Residual			Bentonite Seal Gravel Filter





Beauly - Denny 400kv OHL

Borehole No BF79C-A Sheet 2 of 2 Status Final 20/12/2011

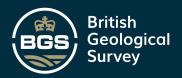
Client: Scottish & Southern Energy plc

Consultant: Balfour Beatty Utility Solutions

Date Started	28/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E 229893.075 m National Grid
Date Complete:	29/10/2011	Initial Core Diameter	86mm		N 823547.940 m National Grid
Hole Type:	RO+RC	Rotary Casing Type	Robit	Ground Level:	311.06 m OD
Equipment:	DB520 Boart	Core Barrel:	T2-101	Plunge:	90°
		Core Bit:	Diamond Impreg	Scale:	1:50

Col	e Bit:	Diamond	Impreg Scale	:	1:50			
Description of Strata	Legend De	Reduced Level	Sampling/ Core Run	I U I	n Situ Testing	TCR (SCR) RQD	FI	Install
Weak brownish grey fine to medium grained PSAMMITT recovered as silty sandy angular to sub angular fine to coarse gravel. Occasional patches of orange staining. Between 8.00m and 9.00m, becomes locally strong.	Ē		8.00-9.00			85 (18) 0	NI	
			9.00-10.00		(S)	65 (0) 0	NR	479
From 10.00m, rare intact sections with micaceous bands.			10.00-11.3	0		100 (28) 15		
) (9)	11.30-12.2	0		100 (0) 0		
			12.20-13.0			100 (21) 0	NI	
From 13.40m to 13.85m, band of pink crystalline			13.00-13.7			100 (0) 0	INI	
quartz. Strong to very strong pink fine to medium grained PSAMMITE with some micaceous bands. Mostly recove non intact as angular to sub angular fine to coarse gravel with some intact sections. Bedding fractures	red	85 297.21	13.70-14.8		(S)	100 (30) 30		
are inclined at 35deg, planar, smooth, tight and clean.			14.80-16.0			100 (0) 0		
End of Borehole at 16.00 m	[XXXXX] ₁₆ .		dard Penetration Test		P Cable Per	cuesion		

End o	f Borehole at 16.00 m	1 %	Core Run	S S	Standard Penetration Test	СР	Cable Percu	recion
U	Undisturbed U100 / U86 Sample	TCR	Total Core Recovery	C	Cone Penetration Test	RO	Rotary Oper	
P	Piston Sample	SCR	Solid Core Recovery	32	N for full 300mm penetration	RC	Rotary Core	d
TW	Thin Wall Sample	RQD	Rock Quality Designation	/175	For given penetration (mm)	so	Sonic Open	holed
D	Small Disturbed Sample	FI	Fracture Index	/25#	Seating blows only (mm)	CON	P Continuous	Percussion
В	Bulk Disturbed Sample	NI	Non Intact	PP	Pocket Penetrometer Test	WLS	Windowless	Sampler
LB	Large Bulk Disturbed Sample	U*	Blows to drive U100 / U86	K	Permeability Test (m/s)		liation	•
w	Water Sample	UT	Thin wall undisturbed sample	L	Packer Test (Lugeons)		Slotted Pipe	Sand Filter
G	Gas Sample	NA	Not Applicable	IV	Insitu Vane Test. Peak		Piezometer Tip	
c	Core	NR NR	No Recovery	IVR	Insitu Vane Test, Residual	 	•	Bentonite Seal
J	Amber Jar Sample	\ \n_	•	HV	Hand Vane Test, Peak	1223	Grout	Gravel Filter
v	Vial Sample	NP	No Penetration	HVR	Hand Vane Test. Residual	國	Concrete	





RO

DB520 Boart

Hole Type:

Equipment:

BOREHOLE LOG

Beauly - Denny 400kv OHL

Rotary Casing Type

Core Barrel:

Borehole No BF79C-B Sheet 1 of 1 Status Final

20/12/2011

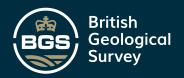
Scottish & Southern Energy plc Client:

Job No: 4578

Balfour Beatty Utility Solutions Consultant: Date Started 29/10/2011 Date Complete: 29/10/2011 Initial Core Diameter

E 229901.400 m National Grid Coordinates: N 823544.813 m National Grid Ground Level: 311.51 m OD Plunge: Scale:

	Core Bit:			Scale	(1:50		
Description of Strata	Leg	end Depth	Reduced Level	Sampling/ Core Run	U	In Situ Te	esting TCF (SCR Result RQI) 1	Install
Very soft spongy dark brown pseudo-fibrous PEA	1	aske aske in aske aske aske in aske aske aske aske aske aske aske				lest	Nesult 1138		
SAND & GRAVEL (Driller's description)		0.70	310.81			368	5)		13. Ta
SAND (Driller's description) (Open holed).		2.00	309.51						
PSAMMITE, weathered and broken. (Driller's description) (Open holed)		3.90	307.61						
End of Borehole at 6.00 m		6.00	305.51			300			
U Undisturbed U100 / U86 Sample TCR Tot P Piston Sample SCR Sol W Thin Wall Sample RQD Roo D Small Disturbed Sample FI Fra B Bulk Disturbed Sample NI No	re Run tal Core Recovery lid Core Recovery ck Quality Designation acture Index n Intact	S C 32 /175 /25# PP	Cone N for f For gir Seatin	ard Penetration Test Penetration Test uill 300mm penetration ven penetration (mm) g blows only (mm) t Penetrometer Test			Cable Percussion Rotary Open Hole Rotary Cored Sonic Open hole Continuous Percu Windowless Sam	: I Ission	
W Water Sample UT Thi G Gas Sample NA Not C Core NR No	ws to drive U100 / U86 in wall undisturbed sample t Applicable Recovery Penetration	e K L IV IVR HV HVR	Packe Insitu Insitu Hand	eability Test (m/s) r Test (Lugeons) Vane Test. Peak Vane Test. Residual Vane Test. Peak Vane Test. Residual		Piez	ted Pipe	Sand Filte Bentonite Gravel Filt	Seal



bam ritchies

29/10/2011

Date Started

BOREHOLE LOG

Beauly - Denny 400kv OHL

Borehole No BF79C-C Sheet 1 of 1

> Status Final 20/12/2011

Client: Scottish & Southern Energy plc

Consultant: Balfour Beatty Utility Solutions

NA

NR

NP

Gas Sample

Vial Sample

Amber Jar Sample

G C J V Not Applicable

No Penetration

No Recovery

 Ons
 Job No: 4578

 Initial Boring Diameter:
 160mm
 Coordinates:
 E 229898.309 m Na

Date Complete: 29/10/2011 Initial Core Diameter N 823536.423 m National Grid
Hole Type: RO Rotary Casing Type Robit Ground Level: 311.64 m OD

Equipment: DB520 Boart Core Barrel: Plunge: 90 °
Core Bit: Screte: 1:50

	Core Bit:	25	1	Scale			1:50			
Description of Strata	Legend	Depth	Reduced Level	Sampling/ Core Run	U	In Situ	r Testing	TCR (SCR) RQD	FI	Install
Very soft spongy dark brown pseudo-fibrous PE SAND & GRAVEL (Driller's description)	عائد عادد عادد عادد عادد عادد عادد عادد	0.60	311.04			rest	result	KQD		. 506
SAND (Driller's description) (Open holed).		1.80	309.84		(
PSAMMITE, weathered. (Driller's description) (Online))pen	3.80	307.84							
End of Borehole at 6.00 m		6.00	305.64		(30				
U Undisturbed U100 / U86 Sample TCR Tc P Piston Sample SCR Sc IV Thin Wall Sample RQD Ri D Small Disturbed Sample FI Fr	ore Run tal Core Recovery blid Core Recovery ock Quality Designation acture Index on Intact	S C C 32 /175 /25#	Cone F N for fu For give Seating	rd Penetration Test enetration Test ill 300mm penetration en penetration (mm) plows only (mm) Penetrometer Test		CP RO RC SO CONP WLS	Cable Perr Rotary Op Rotary Cor Sonic Ope Continuou Windowles	en Hole red n holed s Percussi		

Insitu Vane Test. Peak

Insitu Vane Test. Residual Hand Vane Test. Peak

IVR HV

HVR

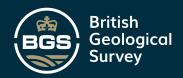
Piezon

Concrete

Grout

Bentonite Seal

Gravel Filter





BOREHOLE LOG

Beauly - Denny 400kv OHL

Borehole No BF79C-D Sheet 1 of 1 Status Final

20/12/2011

Scottish & Southern Energy plc Client: Consultant:

Balfour Beatty Utility Solutions Job No: 4578

	Date Started	29/10/2011	Initial Boring Diameter:	160mm	Coordinates:	E 229889.930 m National Grid
	Date Complete:	29/10/2011	Initial Core Diameter			N 823539,621 m National Grid
	Hole Type:	RO	Rotary Casing Type	Robit	Ground Level:	311.19 m OD
	Equipment:	DB520 Boart	Core Barrel:		Plunge:	90°
			Core Bit:		Scale:	1:50

	Core Bit:	10			Scale	:	1:50		
Description of Strata		Legend	Depth	Reduced Level	Sampling/ Core Run	U	In Situ Testing Test Result	TCR (SCR) F	lns
Very soft spongy dark brown pseudo-fibr SAND & GRAVEL (Driller's description)	ous PEAT.	aske aske aske se aske aske aske aske aske aske aske aske aske aske aske aske aske aske aske aske	0.60	310.59			result	NGO	
(gGS))		1.70	309.49			365)		N
SAND (Driller's description) (Open holed) .								
PSAMMITE, weathered. (Driller's descripholed)	otion) (Open		3.60	307.59					
End of Borehole at 6.00 m			6.00	305.19			300)		
End of Soldiolo at 0.00 III									
Undisturbed U100 / U86 Sample Piston Sample V Thin Wall Sample Signal Disturbed Sample Bulk Disturbed Sample Bulk Disturbed Sample UTUT Water Sample G Gas Sample NA	R Solid Core Recovery D Rock Quality Designati Fracture Index Non Intact Blows to drive U100 / U Thin wall undisturbed	J86	S C 32 /175 /25# PP K L	Cone I N for f For give Seatin Pocke Perme Packe	ard Penetration Test Penetration Test Uil 300mm penetration ren penetration (mm) g blows only (mm) t Penetrometer Test ability Test (m/s) r Test (Lugeons) v/ane Test. Peak		CP Cable Perox RO Rotary Oper RC Rotary Core SO Sonic Open CONP Continuous WLS Windowless Installation III Stotted Pipe III Piezometer Tip	n Hole ed holed Percussion Sampler	
Core NR Amber Jar Sample NP Vial Sample	No Recovery		IVR HV HVR	Insitu ' Hand '	Vane Test. Residual Vane Test. Peak Vane Test. Residual		Piezometer Tip Grout Concrete	Bentor	nite Seal Filter